said method comprising administering an effective immunostimulatory amount of transfected T cells to a patient, followed by administering at least one cytokine to said patient;

wherein said T cells are obtained from the patient and transfected with an expression vector to obtain transfected T cells;

wherein said expression vector comprises a DNA molecule encoding either a chimeric immunoglobulin/T cell receptor or a chimeric immunoglobulin/CD3 protein, and wherein said immunoglobulin-encoding portion of said DNA molecule encodes the variable region of an antibody that binds with the TAA or with an antigen associated with the infectious agent, and further wherein the variable regions of the α and β polypeptide chains of said T cell receptor are replaced by said variable regions of the antibody.

- 31. The method of claim 30, wherein the cytokine is selected from the group consisting of interferon-γ and interleukin-2.
- 32. The method of claim 30, wherein said TAA is carcinoembryonic antigen (CEA).
- 33. The method of claim 31, wherein said transfected T cells are stimulated ex vivo to obtain an increased mass of cells.
- 34. A method for inducing a cellular immune response in a patient against a tumor that expresses a tumor associated antigen (TAA) or against a disease caused by an infectious agent, said method comprising administering an effective immunostimulatory amount of transfected T cells to a patient, followed by administering at least one cytokine to said patient;

wherein said T cells are obtained from the patient and transfected with an expression vector to obtain transfected T cells;

wherein said expression vector comprises a DNA molecule encoding either a chimeric immunoglobulin/T cell receptor or a chimeric immunoglobulin/CD3 protein, and wherein said immunoglobulin-encoding portion of said DNA molecule encodes the